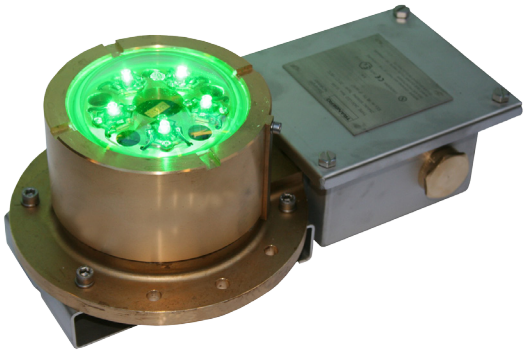
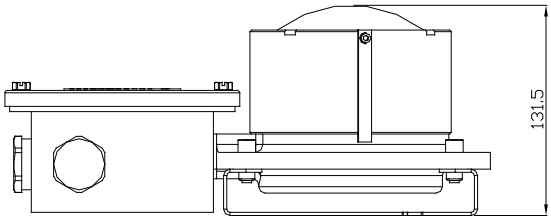
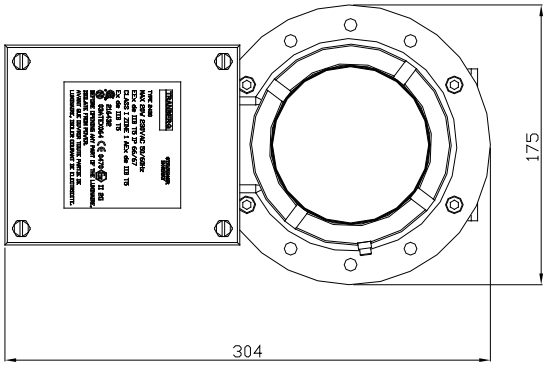
TEF 2430 LED
IECEx PERIMETER LIGHT USER MANUAL



IMPORTANT

Read this instruction carefully before installing the product





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TEF 2430 LED PERIMETER LIGHT USER MANUAL

INTRODUCTION

Thank you for purchasing this product!
For installation, maintenance and assurance of a long life of this product, please follow this manual.

APPLICATIONS

- Perimeter lights on helideck, green light
- Zone 1, zone 2 and safe area

CONTENT IN BOX

The product is fully assembled, and ready for installation.

SAFETY PRECAUTIONS

Note that changes made to the product and/or installation of components which do not conform to the approval, may be a safety violation. The manufacturer will in no circumstance be held responsible for such activity.
For your health and safety, always use safety gear suited for the task. Be certain to follow codes, regulations and/or specific procedures that are related to the installation.

TOOLS REQUIRED

Regular tools required for installation.

- Tools for mounting, e.g. 13 mm wrench - to fasten the luminaire
- 3 mm hexagon key (Unbrako) - for lock/unlock safety pin on the guard-ring
- Flat head screwdrivers, approx. 3,5 mm for connecting to terminal block and 8,0 mm for junction box lid/earth screw
- 32 mm wrench - to disassemble the blind plug, and assemble the cable gland
- 25 mm wrench - for tightening the pressure nut on the cable gland

MAINTENANCE INSTRUCTIONS

The luminaire should be inspected according to Company routines. The manufacturer suggests regular check for water intrusion/condensation which should be removed immediately. Check the drain plug / drain hole function. When cleaning, use only mild detergents. Alcohol or petroleum based products may damage lens, paint or plastic components. When cleaning the dome use moist cloth to avoiding electrostatic hazard.

APPROVALS

Explosion category:	Ⓔx II 2 G Ex de OP IS IIB Gb T5 (ATEX/IECEx) Ex de IIB T5 (Canada) Class I, Zone 1 AEx de IIB T5 (USA)
Certificate No.:	IECEx DNV 13.0016X Nemko 03ATEX064X c SP us 216432
Approved for use in:	Zone 1, Zone 2 and Safe Area
Marking:	CE 0470 Ⓔx II 2 G Ex de OP IS IIB Gb T5 Ex de IIB T5 Class I, Zone 1 AEx de IIB T5
T_{amb}:	-30°C + 50°C
Notified body:	Nemko AS, Norway CSA International, Canada

INSTALLATION INSTRUCTIONS

Only qualified personnel are allowed to perform installation and maintenance tasks to this equipment.

The equipment is ready for installation when leaving the production facilities of Tranberg AS. Check the condition of the equipment and the contents when unpacking. Any damage done to the equipment during the transportation is not the responsibility of Tranberg AS. If the content is not complete, file a claim to the producer immediately.

The TEF 2430 is mounted on a bracket which have several mounting choises using 2 pcs. of M8 (max.) bolts and nuts, or a 2” pipe. The dimensions of mounting board are shown in fig. 1

Important when mounting the luminaire:

The luminaire must always be installed in such a way that the junction box is fully supported from underneath. Normally the entire luminaire would be installed to a flat surface, which provides a proper support for the junction box. In cases where the junction box cannot be mounted on the same surface as the lamp housing/bracket, a full and rigid support must be provided for the junction box. An unsupported junction box may be damaged if stepped upon. Likewise an unsupported junction box that is forced down by e.g. a pull of electrical cables, may expose the gasket between the junction box and lamp housing.

Do not use excessive force when tightening the four screws on the junction box lid, and never use a power screwdriver. Excessive force may bend the lid and provide a way for water to enter the junction box. When closing the lid on the junction box, please ensure that no electrical wires, or the safety wire to the lid itself, are jammed between the lid and the junction box.

Not following these instructions may lead to a risk of water ingress into the luminaire. The manufacturer assumes not responsibility when these guidelines are not followed.

The terminal block of this luminaire is of the “cage clamp” type and one needs either special tool or just a small flat head screwdriver to connect the cable to terminal block. The cable glands are approved for a specific cable diameter. These data can be found in the certificate of the ATEX approved cable glands. Make sure this is not violated. Use of cable with other dimensions is a safety violation and should be avoided. Any damage caused by use of incorrect cable gland not matching the cable dimension, is not the responsibility of Tranberg AS and is not covered by warranty.

Max. cross section of the cable to be connected to the terminal blocks, is 2,5 mm².

To connect the wiring of the TEF 2430 LED perimeter light, perform the following procedure:

Remove the cover from the connection box.
Connecting cable for 230/120 VAC 50/60 Hz:
The main power (230/120 VAC) is to be connected to the terminal blocks, marked 1 and 2.

Connecting cable for 24 VDC/VDC:
The main power (24 V) is to be connected to the terminal blocks.The 24VAC/VDC version are not to be grounded.

Make sure electrical connections are safe and reliable. Make sure the wire slack is as needed. Reinstall the cover. If properly mounted and installed, the luminaire is now ready for use.

Replacement of LED unit:
Deactivate the input power. Loosen the safety pin.
Remove the ring with globe and replace the entire LED unit
If necessary, lubricate the threads with grease
(Renolit Unitemp 2, from Fuchs).
Reinstall the ring with globe and guard, and fasten the safety pin.

Troubleshooting:
No light - Check main power, connections to the terminals blocks or wire to the LED unit.
If the light still does not function, contact the nearest Tranberg dealer or Tranberg AS directly.

Safety precautions:
Note that changes made to this product and/or installation of components, which do not conform to the approval, may be a safety violation. The manufacturer will under no circumstances be held responsible for personal injuries, death or any damage caused by such activity. For your

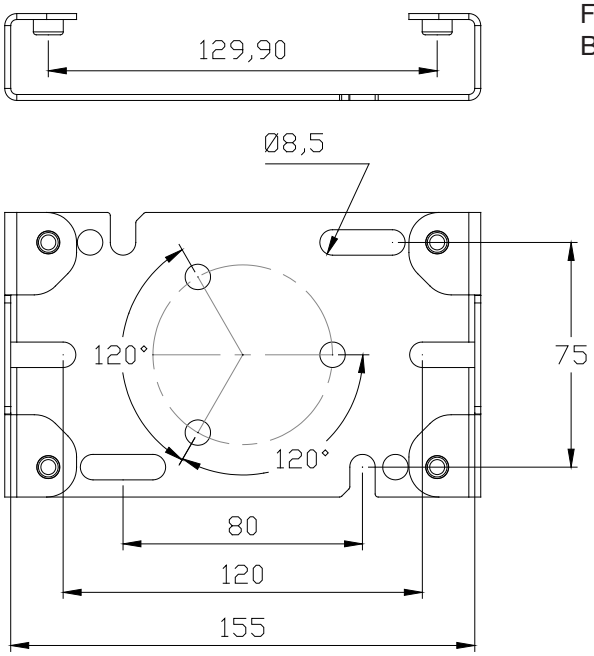

Fig. 1
Bracket

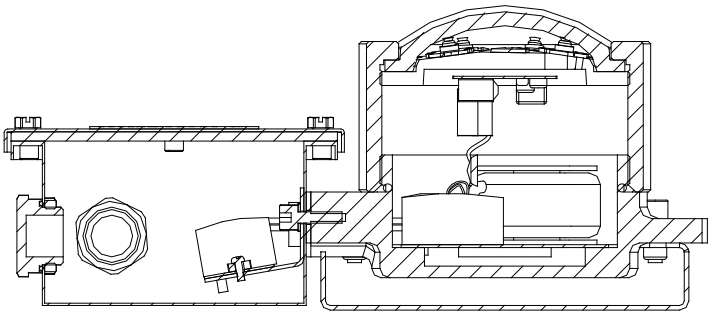

Fig. 2

health and safety, always use safety gear suited for the task, and follow company guidelines and all relevant rules and norms for installation, where applicable.

Do not open any part of the luminaire without disconnecting line voltage.

The luminaire is to be used in Zone 1, Zone 2 or Safe Area.

Warning:
The lamp can only be installed in Zone 1 and Zone 2 if equipped with ATEX and IECEx approved cable glands and stopping plugs.

SPARE PART

Description	Part No.
Transformer, 2 x 127V / 1 x 24V	5086 0078
Terminal block EEx e	5028 0008

Stopping Plug Exe TEF794/M25/9mm Brass	650 2500
Globe unit (low) complete with LED driver and green LED's	4500
Cable gland E204/M25/D with lock nut 12,0-20,1 mm/9mm Brass	6222502

TECHNICAL DATA

Type:	TEF 2430 LED Perimeter light
Description:	Luminaire for use in zone 1, 2 and safe area
Material:	Lamphouse: Copper alloy (brass). Junction box: AISI 316L Globe: polycarbonate Lexan
Supply (input) voltage:	Depending on model. ref. datasheet for details
T-rating:	T5
Light source:	High power light emitting diodes. Ref datasheet for details
Power comsumption:	Max. 11 W
Ingress protection:	IP66/67 without drainplug, IP54 with drainplug. According to IEC 529
Weight:	6 kg.
T_{amb}:	-30°C to +50°C (Arctic version: -55°C to +50°C)
Compliance with:	CENELEC EN 60079-0:2012 CENELEC EN 60079-1:2007 CENELEC EN 60079-7:2007 CSA Standard C22.2 No 0-M 91:General requirements - Canadian Electrical Code, Part II CSA Standard C22.2 No 0,4M 1982: Bonding and Grounding of Electrical Equipment (Protective grounding) CAN/CSA Standard c22.2 No 43-M 1984: Lampholder CAN/CSA Standard c22.2 No 250.0-00:Luminaires CAN/CSA E60079-0:02: Electrical Apparatus for explosive gas atmospheres-Part 0: General Requirements CAN/CSA E60079-1:02: Electrical Apparatus for explosive gas atmospheres-Part 1: Flameproof Enclosures "d" CAN/CSA E60079-7:02: Electrical Apparatus for explosive gas atmospheres-Part 7: Increased safety "e" UL 1598-2000, First Edition, UL Standard for Safety, Luminaires UL 542-1999, Eight Edition, UL Standard for Safety, for Lampholders, Starters and Starter Holders for fluorescent Lamps UL 935-2001, Tenth Edition, UL Standard for Safety, for Fluorescent-Lamp Ballasts ANSI/UL 60079-0-2002, First Edition, Electrical Apparatus for Explosive Gas Atmospheres, Part 0: General Requirements. ANSI/UL 60079-1-2002, First Edition, Electrical Apparatus for Explosive Gas Atmospheres, Part 1: Flameproof Enclosures "d" ANSI/UL 60079-7-2002, First Edition, Electrical Apparatus for Explosive Gas Atmospheres, Part 7: Flameproof Enclosures "e"

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